THE CLAIMS

1. (Previously Presented) A high throughput method for screening fuel additive composition samples, under program control, comprising:

(a) providing a plurality of different fuel additive composition samples, each sample comprising at least one fuel additive;

(b) measuring the deposit formation of each sample to provide deposit formation data results for each sample; and,

(c) outputting the results of step (b).

2. (Previously Presented) The method of claim 1, wherein the at least one fuel additive is selected from the group consisting of detergents, cetane improvers, octane improvers, emission reducers, antioxidants, carrier fluids, metal deactivators, lead scavengers, rust inhibitors, bacteriostatic agents, corrosion inhibitors, antistatic additives, drag reducing agents, demulsifiers, dehazers, anti-icing additives, dispersants, combustion improvers and mixtures thereof.

3. (Original) The method of claim 1, wherein the at least one fuel additive is a detergent.

4. (Original) The method of claim 3, wherein the detergent is selected from the group consisting of aliphatic hydrocarbyl amines, hydrocarbyl-substituted poly(oxyalkylene) amines, hydrocarbyl-substituted succinimides, Mannich reaction

products, nitro and amino aromatic esters of polyalkylphenoxyalkanols, polyalkylphenoxyaminoalkanes and mixtures thereof.

5. (Previously Presented) The method of claim 1, wherein the step of measuring the deposit formation of each sample comprises heating the sample to a first predetermined temperature and determining the weight loss of the sample after a first predetermined period of time.

6. (Original) The method of claim 5, wherein the predetermined temperature is from about 100°C to about 450°C and the predetermined period of time is from about 2 minutes to about 1 hour.

7. (Original) The method of claim 5, wherein the weight loss of the sample is determined by thermal gravimetric analysis.

8. (Original) The method of claim 5, wherein the step of heating the sample is conducted in the presence of air.

9. (Previously Presented) The method of claim 5, wherein the step of measuring the deposit formation of each sample comprises heating the sample to the first predetermined temperature and determining the weight loss of the sample after the first predetermined period of time and then heating the sample to a second predetermined

temperature and determining the weight loss of the sample after a second predetermined period of time.

10. (Previously Presented) The method of claim 9, wherein the second predetermined temperature is higher than the first predetermined temperature.

11. (Original) The method of claim 1, wherein the fuel additive composition further comprises an inert solvent.

12. (Original) The method of claim 1, wherein a robotic assembly selectively retrieves the samples from an array of samples and individually positions the samples in a testing station for determination of the deposit formation.

13. (Original) The method of claim 12, wherein said robotic assembly is controlled by a computer.

14. (Original) The method of claim 1, wherein in step (c) the results of step (b) for each sample are transmitted to a computer, wherein the computer compares the results with a predetermined value delimiting a failure or passing of the results, and the computer identifies failed samples to preclude further testing of the failed samples.

15. (Original) The method of claim 1, wherein the step of outputting comprises storing the results of step (b) on a data carrier.

16. (Original) The method of claim 1, further comprising the step of using the results of step (b) as a basis for obtaining a result of further calculations.

17. (Original) The method of claim 1, further comprising the step of transmitting the results of step (b) to a data carrier at a remote location.

18-61. (Cancelled)

62. (Previously Presented) The method of Claim 1, wherein the fuel additive composition samples each contain less than about 50 ml.

63. (Previously Presented) The method of Claim 1, wherein the fuel additive composition samples each contain less than about 20 ml.